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JAPANESE DEBT MARKETS: AN OVERVIEW

Summary

Although patterned after American models, Japanese debt markets developed different characteristics in response to the nation's individual needs. Many of these features impeded foreign access, but they have been eliminated or eroded as Tokyo's financial liberalization program has progressed. With Japan's huge surplus of savings, domestic markets will surely attract an increasing number of capital-hungry foreigners. By opening and modernizing its debt markets, Japan can play a much bigger role in keeping the global economy growing.

The Basics

At first glance, Japanese debt markets appear to be carbon copies of American markets. The central and local governments issue bonds of various maturities for general revenue and public works projects; credit associations and long-term credit banks offer debentures to fund their operations; and corporations can offer both secured and unsecured straight, convertible and warrant bonds. The over-the-counter market for government bonds is well-developed; so is the market for bonds with repurchase agreements (the gensaki market). A wide range of foreign-issued and foreign currency-denominated notes is also available. With the recent addition of a commercial paper market, it seems that there is an instrument tailored for every need.

Closer examination reveals, however, that Japan's debt markets differ in important respects from this country's.

Public bonds - The central government issues both long-term bonds and short-term notes for general revenue purposes as well as bonds to fund public

works projects or other special programs. The sale of the majority of long-term general revenue bonds (with maturities of five, 10 or 20 years) is arranged through negotiations between the Bank of Japan and an underwriting syndicate composed of all types of financial firms. About one-fourth to one-third of any one issue is placed with official accounts, such as the national pension fund or various semi-governmental agencies (see Table 1).

This system is a legacy of the extreme economic and financial conditions immediately after World War II. Given the very low yield of government bonds compared with the return on money lent or raised for investment in plant and equipment, financial institutions had to be induced to participate in the underwriting consortium. Since the needs of reconstruction insured that the demand for funds to invest far outstripped the supply, banks and securities companies went along with the syndicate system to assure access to the BOJ's discount window, a source of emergency funds. For many years, therefore, this system was a powerful monetary policy tool. When the economy began to overheat, the amount and/or terms of the monthly issue were changed to drain liquidity from the market (syndicate members are obligated to buy the bonds) and put a brake on investment activity.

The amount of a long-term bond issue and its terms are set during the negotiations between the BOJ and the syndicate leadership, although the unequal positions of the two sides usually meant until recently that the BOJ dictated the terms. Distribution of the bonds among the 815 syndicate members is governed by fixed shares set by the Ministry of Finance and the syndicate leadership.

Until the 1980s only three foreign firms were allowed to participate in the underwriting syndicate. This was not a problem as long as long-term bonds remained unattractive. (The low yields did not attract buyers outside the syndicate, meaning members were stuck holding them.) Since the government began to roll over the large amount of deficit-financing bonds issued during the 1970s, however, yields have improved. Lower capital spending, continued high savings rates and a gradual freeing of interest rates have forced the government to offer more attractive terms to keep the syndicate system viable.

The higher yields have attracted foreign interest. Fifteen foreign companies had joined the syndicate by 1984 and another 49 since then for a total of 64. The share alloted to foreign firms, however, has remained tiny (under 7 percent), even though they are interested in increasing their participation (see JEI Report No. 22B, June 6, 1987). With Japanese firms increasingly active in foreign bond markets, particularly in this country, foreign companies have been clamoring for a bigger share of the Japanese pie. This issue will be examined in greater detail below.

Short-term central government notes (with maturities of two to four years) are distributed in one of two ways. An auction system very similar to that used in the United States has been in place since 1978. A fixed-rate system for special-purpose flotations was introduced in 1982. Since the auction system produces a more competitive instrument, the secondary market for short-

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Table 1: Government Bond Issues Planned for Fiscal 1988

(in trillions of yen)

	New Revenue			Refunding			
	Total	Construction Bonds	Deficit Bonds	Total	Construction Bonds	Deficit Bonds	Total
Syndicate underwriting	Y4,051.0	Y2,190.0	Y1,861.0	Y4,749.0	Y2,243.5	Y2,505.5	Y8,800.0
Discount notes	500.0	500.0	0.0	0.0	0.0	0.0	500.0
10-year bonds	3,551.0	1,690.0	1,861.0	4,749.0	2,243.5	2,505.5	8,300.0
Public auction	1,500.0	1,500.0	0.0	5,493.3	5,493.3	0.0	6,993.3
Treasury bills	0.0	0.0	0.0	2,257.6	2,257.6	0.0	2,257.6
Medium-term notes	1,100.0	1,100.0	0.0	1,635.7	1,635.7	0.0	2,735.7
20-year bonds	400.0	400.0	0.0	1,600.0	1,600.0	0.0	2,000.0
Trust Fund Bureau	1,500.0	750.0	750.0	2,000.0	2,000.0	0.0	3,500.0
10-year bonds	750.0	0.0	750.0	1,000.0	1,000.0	0.0	1,750.0
20-year bonds	750.0	750.0	0.0	1,000.0	1,000.0	0.0	1,750.0
Postal savings underwriting	950.0	600.0	350.0	300.0	300.0	0.0	1,250.0
10-year bonds	950.0	600.0	350.0	300.0	300.0	0.0	1,250.0
Direct sales through post offices	840.0	650.0	190.0	160.0	160.0	0.0	1,000.0
Discount notes	40.0	40.0	0.0	0.0	0.0	0.0	40.0
Medium-term notes	110.0	110.0	0.0	160.0	160.0	0.0	270.0
10-year bonds	690.0	500.0	190.0	0.0	0.0	0.0	690.0
Replacement (official accounts)	0.0	0.0	0.0	1,807.9	1,504.8	303.1	1,807.9
Trust Fund Bureau	0.0	0.0	0.0	1,807.9	1,504.8	303.1	1,807.9
Bank of Japan							
Total	8,841.0	5,690.0	3,151.0	14,510.2	11,701.6	2,808.6	23,351.2

Source: Bond Underwriters Association of Japan, Bond Review.

term government notes has developed in a steady fashion. Compared to the U.S. market, however, the one in Japan is small and restricted.

Government-guaranteed bonds are issued by the central government for specific purposes, usually to finance public works projects. The total amount to be issued in the fiscal year is determined by the general account budget. Placement of each monthly issue is entrusted by the Bank of Japan to a commercial underwriter, usually one of the long-term credit banks. In turn, the institution organizes an underwriting syndicate to handle distribution to institutional and individual investors. The terms of each issue are subject to some negotiation but are usually attractive enough to encounter no market resistance.

Local governments also float bonds every year under a system supervised by the Ministry of Finance through the Home Affairs Ministry. Each local government appoints a trustee, usually a local bank, to lead the issues for the year. The trustee often organizes and then negotiates with a syndicate made of up local and national institutions. If the terms are acceptable to the central government, the flotation proceeds.

Corporate bonds - While the end result is the same, the Japanese method of issuing corporate bonds is different from the American practice, mainly because of more restrictive regulations. The issuing company appoints a managing underwriter, usually its main securities broker, and a trustee, normally its major bank. The managers and trustees meet once a month to review which corporations are scheduled to issue bonds the following month and to negotiate the terms. If they feel the market cannot absorb all the planned issues, the total amount of bond issues is also negotiated. Because regulations specify the time between announcement of a bond and its placement and then between placement and settlement, it is advantageous for all corporate bonds to be announced at the end of the month. Thus a "fixed calendar" system has developed for corporate bonds -- and, by default, for public bonds as well since they are issued when corporate bonds are not.

Rating corporate bonds and determining their terms were issues in Japan until just recently. A four-grade rating system (B, BB, A and AA) looked only at certain financial ratios of the issuer, including net assets and its net worth to total capital ratio, and compared them with uniform standards. The rating derived from this comparison determined the terms of the issue, which were non-negotiable (see Table 2). Clearly this system drives a wedge between the market's evaluation of the soundness of a company as expressed in its stock price and the company's bond worthiness. At the urging of the Ministry of Finance, Japanese banks and securities companies set up an independent bond rating company in 1986. Although many firms were initially reluctant to provide the proprietary information necessary for accurate evaluations, most financial institutions have agreed to participate in the system, providing a single, comprehensive source of credit information. With the adoption of a grading system comparable to this country's, which indicates the degree of certainty of payment of principal and interest, the Japanese market is well on its way to conforming with de facto international standards.

As far as the variety of bonds available, straight, secured bonds have been the favored instrument, mainly because regulations and business practices have limited other forms. Convertible bonds, which can be turned into shares

of the issuing company under specific conditions, have been available since 1938, but they are not often chosen because of strict qualification requirements even though they have the advantage of a lower coupon compared with a straight bond. In the 1970s the first unsecured convertible bond was issued (1973) and notes with maturities ranging from six to 15 years (rather than the standard 10) were offered.

Table 2: Terms of Corporate Bond Issues

(as of March 1987)

Rating	Maturity (years)	Coupon Rate (percent)	Issue Price (yen)	Yield (percent)
AA	12	5.3%	Y99.50	5.368%
	10	5.3	99.75	5.338
A	12	5.4	99.50	5.469
	10	5.4	99.75	5.438
BB	12	5.5	99.50	5.569
	10	5.5	99.75	5.538
B	10	5.6	99.75	5.639

Source: Nomura Research Institute

Warrant bonds, which give the holder the right within a certain period to demand that the company issue new stock and buy it at a predetermined price, were introduced in 1981 at the request of the financial community. This instrument offers advantages to both the issuer and the buyer. It is less costly to issue since it carries a lower coupon. It can be more lucrative for the buyer since he has the opportunity to collect dividends if the warrants are exercised and also to earn capital gains if the stock is eventually sold. The issuing company can benefit as well from new stock issues initiated by warrant holders since the general public then has a chance to buy stock in a firm that may be thinly traded. Warrants have proved mildly popular, although a self-imposed industry restriction against separating warrant rights from the underlying bond (as is often done here, meaning brokers sell both parts) has limited their appeal.

Because of some initial improprieties when a Western-style financial system was first introduced in Japan, a security to back a bond issue has been a standard requirement since the 1920s. This restriction made sense during the immediate postwar years when many firms were financially shaky, but its rationale has eroded as the economy has prospered. Companies that are financially strong are required to behave just like weak companies, translating into high up-front costs. Companies in certain lines of business, particularly trading companies, can find it very difficult to provide security since they have few tangible assets. And finally, a Japanese company planning to float a bond overseas (where unsecured bonds are the norm) might earn a low credit rating because of its history of offering only secured bonds at home.

Under increasing pressure from domestic firms, the Ministry of Finance has liberalized the security requirements, making major changes at least once a year since 1983. As a result, the number of firms eligible to float unsecured bonds rose from 30 in 1983 to about 180 in early 1987 and to approximately double that number today. This change has been a major factor behind the boom in convertible bonds.

A bond repurchase agreement, or gensaki transaction, is a short-term financing ploy; the bond seller agrees to repurchase the bond at the end of a certain period of time, usually for a higher price. The bond seller gets to use the cash for the specified period, while the bond buyer is assured of a profit. Through the 1970s this form of bond trading was extremely popular because it was one of the few instruments that offered a market-determined interest rate; moreover, it was open to a wider range of customers, including foreigners. As much as half of all bond transactions were gensaki exchanges by the late 1970s. The proportion has declined, however, as other market-interest instruments have become available.

Nevertheless, gensaki trades will remain a major feature of the market for several reasons. Securities companies use gensaki deals to finance much of the inventory of stocks they need to complete stock trades. Second, foreign institutions, private businesses and certain types of credit unions are barred from participating in the other two major short-term money markets, the call and discount markets. Therefore, the gensaki market is their only source of short-term finance. Smaller banks and other similarly sized financial institutions have also made increasing use of the gensaki market since they find it difficult to operate in markets used by larger firms. Deregulation of interest rates and liberalization of markets will continue to whittle away at the gensaki market, but it is unlikely that it will be reduced to a minor role.

Foreign Frenzy

Pacing the liberalization of the domestic market, there has been a surge of activity in foreign bond markets and in bonds denominated in foreign currencies. The Finance Ministry opted to liberalize Euroyen markets before domestic markets to give Japanese financial firms a chance to experiment with the rough and tumble of free markets overseas before setting them loose at home. As deregulation has progressed in both markets, a host of new debt instruments has been created bearing colorful names such as sushi and harakiri bonds. (See the Appendix for an explanation of the various types of new bonds.)

Deregulation of the domestic market for yen-denominated bonds proceeded one step behind the decontrol of Euroyen markets, with the result that the domestic market languished. Foreign governments and agencies have been able to float yen-denominated issues in Japan (so-called samurai bonds) since 1970, and the growth of the market was steady if unspectacular until 1985. The Euroyen market, on the other hand, has enjoyed explosive growth (Tables 3 and 4). There were only 15 samurai bond issues worth Y420 billion ($3.4 billion at Y125= $1.00) in 1987 compared with 149 Euroyen market issues totaling Y2.9 trillion ($23.2 billion) the same year.

Table 3: Inward and Outward Bond Flotations, FY 1970-FY 1987*

(in millions of dollars)

Fiscal Year	Flotation of External Bonds by Residents	Flotation of Bonds in Japan by Non-Residents
1970	$122	$0
1971	55	0
1972	31	0
1973	22	0
1974	446	0
1975	1,565	0
1976	1,577	0
1977	1,378	0
1978	2,749	0
1979	3,320	1,441
1980	3,654	1,407
1981	5,707	3,500
1982	6,812	3,651
1983	9,690	3,271
1984	13,876	5,237
1985	16,047	6,751
1986	25,579	3,812
1987**	32,511	2,902

*Balance of payments basis.
**April 1987-January 1988 only.

Source: Ministry of Finance

The imbalance is widening even though Tokyo has equalized the regulations governing the terms of offer and the flotation qualifications between the two markets. Residual controls on domestic bond flotations are the main reason. The amount of paperwork and time necessary to float a yen-denominated bond in Japan far exceed those in the Euroyen market -- up to 60 days versus a week. Regulations governing settlement and delivery of securities also reduce flexibility. In addition, the secondary market for samurai bonds remains very thin, making the bonds illiquid and curtailing their attractiveness. The Big Four brokerage houses -- Daiwa Securities Co., Ltd., Nikko Securities Co., Ltd., Nomura Securities Co., Ltd. and Yamaichi Securities Co., Ltd. -- agreed to begin market-making activities in June 1986 in an effort to energize the secondary market and breathe life back into the primary market. Although the Big Four are a major force in Japan, there are about 30 market makers in the Euroyen market, keeping the secondary market there very active and competitive.

Domestic and foreign companies have naturally gravitated to the market that offers the greatest flexibility and lowest costs. Tokyo is in the process of devising a response to this situation, with implementation of a shelf-registration system in October as the first step. Shelf registration allows an issuer to prepare the paperwork for a certain amount of bonds at one time but float them at any time during a certain period. Thus, an entire year's worth

of borrowing can be cleared at one time and the issues put on the "shelf," ready to be floated when market conditions are favorable. This system, which is in place in the United States and Europe, will certainly help but does not address all the problems.

Table 4: External and Internal Bond Offerings, FY 1982-FY 1987*

(in billions of yen)

a. external bonds issued by residents

Fiscal Year	Foreign Currency-Denominated Bonds		Euroyen Bonds		Total	
	Number	Amount	Number	Amount	Number	Amount
1982	n.a.	n.a.	n.a.	n.a.	202	Y1,650.4
1983	n.a.	n.a.	n.a.	n.a.	280	2,357.4
1984	337	Y3,288.5	0	0.0	337	3,288.5
1985	345	3,630.6	17	Y302.0	362	3,932.6
1986	431	4,408.6	17	435.0	448	4,843.6
1987**	114	1,610.2	6	200.0	120	1,810.2

b. bonds issued in Japan by non-residents

Fiscal Year	Foreign Currency-Denominated Bonds		Euroyen Bonds		Total	
	Number	Amount	Number	Amount	Number	Amount
1982	n.a.	n.a.	n.a.	n.a.	72	Y877.0
1983	n.a.	n.a.	n.a.	n.a.	65	794.0
1984	0	0.0	71	Y1,253.0	71	1,253.0
1985	11	Y298.6	62	1,350.0	73	1,648.6
1986	13	224.7	30	490.0	43	714.7
1987**	1	11.4	11	213.0	12	224.4

*Notification basis.
**April-June 1987 only.

Source: Ministry of Finance

In the meantime, the samurai market is becoming a rich source of yen funds for developing countries, especially Asian neighbors. These smaller nations are generally unable to meet the competitive conditions in the Eurobond market but have found an acceptable alternative in samurai bonds. Tokyo could encourage this trend as part of its efforts to play a greater role in supporting the global economy.

Commercial Paper

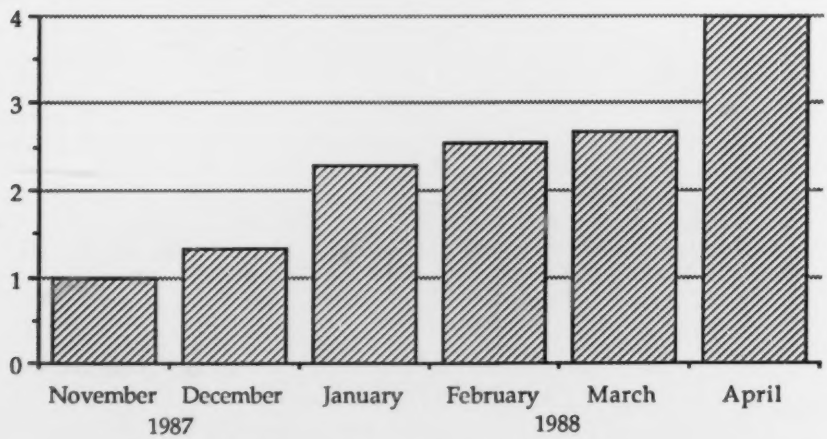
The latest innovation to appear on Japanese debt markets is commercial paper. The CP market was developed in the United States as a convenient means for companies to raise cash for short- and medium-term requirements. CP is an unsecured pure debt instrument issued directly by the borrower and backed only by its promise to repay. Although CP generally carries a slightly higher interest rate, the ease and rapidity with which it can be issued and money saved by not paying for trustees or underwriters more than compensates for this cost.

The Finance Ministry viewed the CP market as too risky and speculative until just last year. Even when the market opened November 20, 1987, the Ministry imposed some rules that caused analysts to question the outlook for the new instrument. Only firms currently qualified to float unsecured bonds (360 or so) are eligible to issue CP. The minimum denomination was set at Y100 million ($800,000) and the maturity restricted to between one and six months. Banks and securities companies must underwrite the new instrument. Finally, only 53 major companies can issue unconditional CP; the remaining firms' CP must be guaranteed by the underwriter. The only advantage CP retains over conventional bonds is the speed of issue; bonds take at least 30 days to arrange while CP can be floated in as little as a few days.

The CP market has surprised analysts in its first six months of operation by surpassing even the optimistic expectations of the Finance Ministry. The outstanding balance at the end of April was estimated to be nearly Y4 trillion ($32 billion), thanks to a Y1.7 trillion surge in issues during that month (see Figure). With the average interest rate on a three-month note at 3.9 percent, CP is well below the average three-month certificate of deposit (4.3 percent), above the short-term prime rate (3.4 percent), and on a par with the bill discount rate (between 3.8 and 4.3 percent). For highly qualified firms, the CP market is becoming analogous to the interbank market -- a highly liquid market that allows optimal use of cash on hand. Although the market is still restrictive by U.S. standards, its first few months of operation have been an unqualified success.

Japan's Commercial Paper Market

(balance in trillions of yen at end of month)



Source: Nihon Keizai Shimbun

Breaking the Bonds

Market watchers agree that the introduction of a shelf-registration system is the biggest change on the horizon. It could give a major boost to the straight bond market as well as the samurai market if the legislation is adopted in time. Tokyo has been taking other steps, however, in an effort to make the Japanese market more attractive and open.

- The Ministry of Finance reduced the period between registration of a bond issue and its flotation from 30 days to 15 on April 1. This applies to all types of bonds. Samurai bonds, however, still have an extra step between registration and issue, meaning the waiting period has been cut from 60 days to 45. MOF hopes this step will make it easier for borrowers to match offer terms with expected market conditions.

- MOF has been relaxing the qualifications required to issue unsecured bonds. Although nearly 400 firms presently have this right, this number is still a fraction of the nearly 3,000 publicly traded companies in Japan. As the unified credit rating system matures, MOF can be expected to lower its criteria for unsecured issues.

- A broader range of maturities and rates is passing MOF inspection. The minimum maturity was six years; it can now be as short as four. Five-year notes are prohibited to prevent competition with the long-term credit institutions, which rely on five-year debentures for much of their fund-raising. Liberalization of interest rates is also spreading to bonds as MOF has approved some floating-rate issues.

- The postal savings system won the right April 1 to sell government bonds over the counter as a partial offset for the elimination of most tax-exempt savings accounts, which form a major share of postal savings funds. With thousands of offices around the country, this change could have a significant impact on the secondary bond market. Postal officials are satisfied with the results so far, but plan no major campaign to take business away from securities dealers or commercial banks.

- The Finance Ministry hopes to change the current practice of rotating the position of lead underwriter on government bonds among the Big Four securities firms. A system of competitive bidding will be phased in over the next year or so.

- MOF is also considering dropping the requirement that a bond issuer commission a commercial bank to act as trustee. Borrowers complain that this Japanese practice adds to the cost of flotation, noting that no trustee is needed in the American or European markets. The "commission bank" system is a sensitive point with MOF since commercial banks naturally oppose any change.

- While domestic commercial banks are allowed to underwrite some government bond issues, handle some private domestic placements and participate fully in foreign corporate bond markets (through overseas subsidiaries), they are still barred from acting as lead manager for a foreign flotation by a domestic corporation. The Finance Ministry has begun negotiations with banks and securities companies to end this restriction. Brokerage houses, however,

are demanding a high price for greater freedom for banks; they want access to foreign exchange trading, relaxed flotation criteria, an end to the commission bank system and universal adoption of the U.S. bond credit rating system.

- Finance is planning to computerize and centralize the secondary bond market beginning in July. The Japan Bond Trading Co., Ltd., a clearing house set up by domestic brokerages, will become the central trading location for government, corporate and foreign bonds. Computers and telecommunciations facilities will be installed to insure that uniform, real-time quotations are available to all parties. In addition, MOF will drop the registration system for the secondary market, reducing the time and paperwork involved in settling transactions.

These changes will certainly help bring the Japanese bond market closer to global standards. Although foreigners have welcomed these moves, they argue that more needs to be done, especially in light of the major presence the Japanese are building in overseas bond markets. This view is particularly widespread in the United States, where Japanese investors buy as much as one-half of the U.S. Treasury bonds offered at any one auction and where Japanese firms control several primary government bond dealers.

Bond Bashing

The basic issue is that American financial firms, especially securities houses, want an enlarged presence in the primary Japanese government bond market in order to make more money and enhance their prestige. The syndicate system creates a fixed pie, however, so that an increase in the share for foreigners can only come at the expense of domestic firms. Naturally, Japanese companies oppose any redivision of the pie, arguing that they supported the system during the years when it was unattractive to participate. The Ministry of Finance is ambivalent since the system works so well.

Among the 30 foreign brokers and 34 overseas banks that currently have a stake in the syndicate, Salomon Brothers Inc.'s Japanese subsidiary is the most active and vocal. It has been a syndicate member longer than any foreign firm and has the largest share -- 1 percent. The 5.721 percent share for all foreign securities companies is small compared with the total for Japanese securities firms (26.1 percent) or banks (about 45 percent). Of all the central government securities issued in fiscal 1987 (ended March 31, 1988), about 37 percent was distributed through the syndicate, 34 percent was placed in official accounts, and the remaining 29 percent (mostly short-term notes) was sold by auction.

In an effort to head off conflict, Tokyo instituted a mixed auction/syndicate system in the last quarter of 1987. All 20-year bonds are now placed by auction, much like the system used in the United States. In addition, one-fifth of the 10-year bonds are offered through a non-competitive bidding system. Interested parties submit bids to the ministry immediately before the terms for the bonds to be issued through the syndicate are set. Although each firm may bid for whatever amount it wants, a limit of 1 percent of the offering is awarded to any one company. At the first auction of 10-year bonds under the new system, foreign firms won 16.6 percent. Foreign participation in the 20-year bidding has been mixed depending on the attractiveness of the terms.

In addition, the government has relaxed the qualifications required for foreign firms to participate in the auction of two-, three- and four-year bonds.

This is not enough to quiet foreign firms. They -- and major domestic players -- want the government to use an open auction system for all types of bonds. Smaller companies oppose this change since they would probably be unable to compete. It is an open question in Japan whether foreign firms could compete effectively against the major Japanese banks and securities companies with their well-developed client base, which insures that bonds can be placed quickly and profitably in the hands of investors. Given the vast resources available to the biggest Japanese firms, even the largest, most determined foreign firm could be outbid.

The Finance Ministry's response is likely to be a gradual rise in the syndicate share for foreigners and increased use of auctions for 10-year bonds. While this will delay a shakeout, small firms already see the handwriting on the wall and are beginning to merge while they still have a choice. It is unclear whether foreign firms will be satisfied with MOF's tried-and-true incremental approach. The danger is that Washington will not be patient and officially or unofficially begin to restrict Japanese access to U.S. financial markets. Delayed approval of Japanese purchases of U.S. primary dealers by the Federal Reserve Board has already raised fears in Japan that the squeeze may be on. Such restrictions, however, are like cutting off one's nose to spite one's face since the United States will remain dependent on foreign funds to finance the giant federal budget deficit for many years to come. For its part, MOF must balance everyone's interests in reforming the government bond system. This assures that changes will come slowly and gradually.

Conclusion

Given Japan's giant surplus of savings, it is interesting that liberalization of domestic bond markets has not been a very high priority for the Finance Ministry. Japanese investors have been willing to accept the risk of participating in foreign markets by sending their money abroad, substituting for foreign borrowers coming to Japan. The fact that Japanese investors run the risk of exchange rate shifts makes the massive outflow of funds over the past several years all the more amazing. The good luck, however, cannot last. Should Japanese investors lose interest in foreign markets (for whatever reason), the opportunities for foreigners to seek financing in Japan's rich financial markets must be as varied as possible. If the nation is to become a fully rounded financial center and play a major role in supporting global development, bond market reform must proceed.

For further information, contact Jon Choy.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

Appendix: A Glossary of Japanese Debt Instruments

Aome bond - A general term for all bonds issued in the Japanese market by foreigners, even other Asians. The literal translation is "blue-eyed" bond. The opposite of kurome bonds.

Earthquake bond - Bonds redeemable in the event of a natural disaster. Earthquakes are a constant threat in Japan, and this instrument was developed to placate concerned investors.

Geisha bond - Foreign-currency bonds privately placed in Japan by foreigners. The first issue of geishas was in June 1985; it was denominated in European Currency Units.

Harakiri swap - A Euromarket transaction where a Japanese company issues a dollar-denominated bond and swaps the proceeds with a Japanese institution, usually a bank, for yen debt at a specified exchange rate and interest rate. If the interest rate on the yen debt is higher than the rate the Japanese company pays in a regular fund-raising operation, the exchange appears to have been made at money-losing terms, thus the use of the Japanese term for ritual suicide. While most observers see this tactic as a means of buying market share, it is possible to break even or turn a small profit by further swapping the floating-rate dollars for fixed-rate ones and waiting for an advantageous exchange rate.

Heaven-or-hell bond (Tengoku-jigoku bond) - These are bonds denominated in dollars but paying interest in yen. The principal is furthermore linked to the yen-dollar exchange rate at the time of maturity: the lower the yen, the higher the redeemable value; the stronger the yen, the lower the value. When first offered by Nomura's European subsidiary, exchange rates of Y180 to Y160 were the break-even points. Obviously if the investors were to cash in these bonds today, it would be a hellish experience. If the yen falls far enough by the time the bonds mature in another few years, however, investors may think they are in heaven. This instrument is targeted at people interested in speculating on exchange rates.

Kagonuke lease - Japanese leasing companies are barred from offering yen-denominated loans to foreigners. The kagonuke ("slip out of a cage" or "escape through the back door") lease has been devised as a way around this barrier. The assistance of a foreign bank as intermediary is necessary. The bank simultaneously arranges a Euroyen loan for the foreign borrower and leases some sort of asset (such as old capital equipment) from the Japanese leasing firm. The bank assigns the Euroyen credit to the leasing company, which then cancels the bank's lease obligations. The net effect is that the leasing company ends up receiving the interest payments of the foreign borrower in exchange for its yen. The practice is a sensitive point among banks, the Finance Ministry and leasing companies since the kagonuke rates are generally well below what banks can charge.

Kamikaze swap - This maneuver is identical to the harakiri swap, but it is initiated by a foreign firm in the Japanese market.

Kurome bond - A general term for any bond issued by a Japanese company in the Japanese market. The opposite of an aome bond.

Natto bond - See sushi bond below.

Reverse harakiri swap - The mechanics of the transaction are the same as a harakiri swap, except that the currencies are reversed -- a Japanese bank swaps dollars for the the yen funds raised through a bond issue (domestic or international) by a Japanese entity.

Samurai bond - These are bonds denominated in yen and issued in the Japanese market by foreign entities. The first samurai bond was placed in 1970. Issuers were initially restricted to foreign international institutions or foreign sovereign governments; today, however, a credit rating of just single-A is required. Since 1986 innovations such as dual-currency samurais have been offered to keep the market active.

Samurai lease - Developed by the Bank of Japan in 1978, this instrument involved low-interest yen loans by the Export-Import Bank of Japan to domestic leasing companies, which in turn would use the funds to purchase foreign equipment with sales contracts denominated in dollars. It was hoped that this would encourage imports and give leasing companies a chance to try their hand at complex international finance and cross-border leasing. The program lasted only one year.

Shogun bond - These are similar to samurai bonds except that they are denominated in a foreign currency rather than yen. The World Bank inaugurated this innovation in 1985, raising approximately $300 million. Subsequent issues have been denominated in Canadian, Australian and American dollars.

Shogun lease - This is a yen-denominated, cross-border lease. For foreign firms with significant yen income, this instrument provides a hedge against exchange rate changes. Comparatively low rates are another advantage.

Sushi bond - This is a bond issued by Japanese firms in the Euromarket. It is denominated in a foreign currency but intended for Japanese buyers. The generally low coupon makes them unattractive to foreign buyers, but they are still palatable to Japanese insurance companies and other institutional investors. In the past these investors got around the ceiling on investments in foreign-issued foreign bonds by purchasing sushi bonds. Since the overseas investment ceiling was raised significantly in 1986, demand for sushi bonds has dropped sharply. The more apt name for this instrument, natto bond, is derived from a pungent, sticky fermented soybean food that foreigners (and even many Japanese) find unappetizing.

Tengoku-jigoku bond - This is the Japanese name for heaven-or-hell bonds (see above).

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